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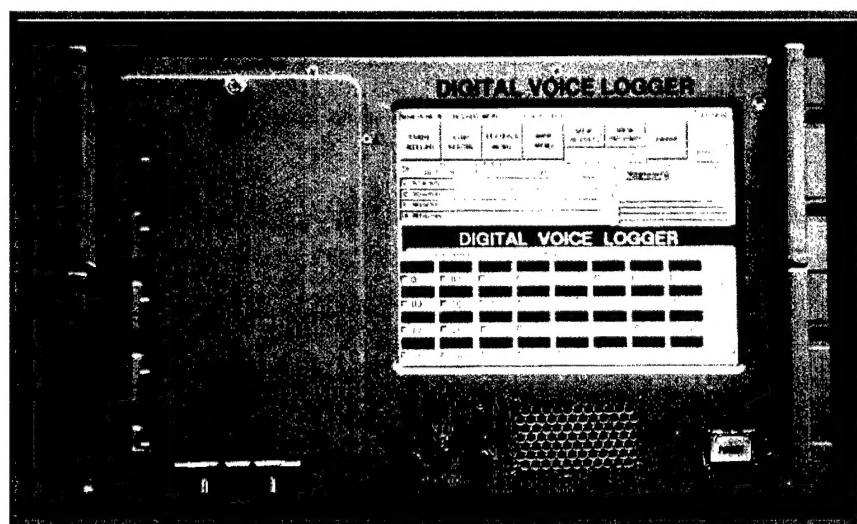
RD-681A/UNH Recorder-Reproducer

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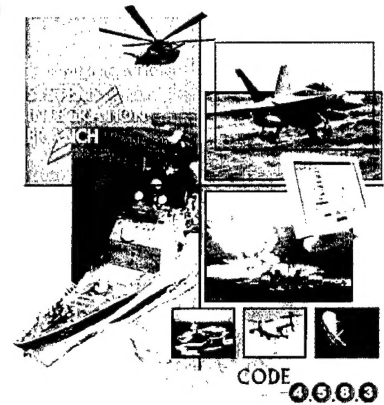
WHY HAVE A VOICE RECORDER?

Voice recorders provide a precise and verbatim log of internal and external radio voice communications. This information can be invaluable for:

- Immediate playback of transmissions during combat or emergency situations to determine exact message received or transmitted.

- Determining if proper operational & radio telephone procedures are being followed.

- Conducting incident or accident analysis.

- Providing court-acceptable records.

DESCRIPTION

- The RD-681A/UNH is a commercial-off-the-shelf (COTS), PC-based, state-of-the-art, voice recording system that automatically records when voice signals are present at any one of 32 input channels. It operates in the Windows NT ™ environment & can record 32 audio channels (expandable to 80). Digital interface options are available. The system can be housed in a standard EIA cabinet with a 19-inch rack configuration.

- A major advantage of the RD-681A/UNH is that audio recording need not be interrupted to provide simultaneous & synchronized playback of four channels of audio. This allows recording to continue while the operator plays back previously recorded transmissions.

- Instant recall on monitored channels is available via a single key action. This feature facilitates "hard to hear" or "hard to understand" distress calls.

- Voice data is digitized by the processor & stored on rewritable magneto-optical disks. Each disk can record up to 460 hours of voice transmissions. Commands & operator input may be given to the computer via touch screen or keyboard.

- Since the system does not contain a magnetic hard disk drive, communications security is obtained when the magneto-optical disks containing the recorded data are ejected. To ensure rigid quality control standards are maintained, each RD-681A/UNH is subjected to a total system end-to-end test.

FEATURES

- Meets communications security requirements for shipping.

- Digital interface options available (NTDS).

- Signal recognition circuitry records only voice signals.

- Network connection for remote monitoring & control.

- Current IRIG-B/HAVEQUICK time format & time-of-day synchronization.

- Multi-channel voice data archiving, including automatic switching of recording drives in the event of drive or disk failure or when the recording disk is full.

- Remote & internal alarm to warn that the disk is in danger of becoming full or to warn of media error.

- CD-ROM computer-based training.

- Journal of all magneto-optical disks with data & all recorded audio time tagged for easy retrieval.

- Flat panel display:
  - *Will not implode on impact, making it safer for an operator in a shipboard environment.*
  - *Less EMI susceptible than CRT displays.*
  - *Bright & viewable off axis.*

- Password protected to prevent unauthorized removal or erasure of magneto-optical disks.

- System self-test diagnostics & operator help menu.

- Built-in internal speaker.

SPECIFICATIONS

Nomenclature:	RD-681A/UNH Recorder-Reproducer
NSN:	TBD
RIC:	TBD
Operating Sys:	Windows NT ™
Display:	
Type	Color
TFT	10" (diagonal)
Keyboard:	80 key IBM-compatible
Drives:	
Operating	5.2 GB magneto-optical
1 Priority	5.2 GB magneto-optical
2 Archive	5.2 GB magneto-optical
1 Current	5.2 GB magneto-optical
Storage/disk:	460 hours at 4:1 comp.
Compression:	4:1 ADPCM/5:1 ADPCM
Playback:	
Access time	40 ms
Monitor	Any of 32 channels
Search by	Channel, date or time
Multi-channel	Up to 4 channels real-time
Shock:	MIL-S-901 Grade B (pending)
Vibration:	MIL-STD-167
Alarm:	Internal/external
	Dry contacts
Impedance:	Input: 25 kOhms
	Output: As low as 50 ohms
Isolation:	>80 dB between channels
Outputs:	
Audio	0.5 W
Headphones	8-600 ohms
Line	0 dBm
Power:	
Voltage	90 to 130/180 to 250
Frequency	47 to 63 Hz
Consumption	300 W
Temperature:	
Operating	0 to 45 degrees C
Shipping	-40 to 60 degrees C
Storage	0 to 60 degrees C
Relative Humidity:	20 - 80% non-condensing
Weight:	50 lbs.
Height:	10.5"
Width:	19.125"
Depth:	17.5" w/o handles
	19.375" with handles

Matt Durkin

Communication Systems Integration Branch
Naval Air Warfare Center Aircraft Division Patuxent River, Code 4.5.8.3.1
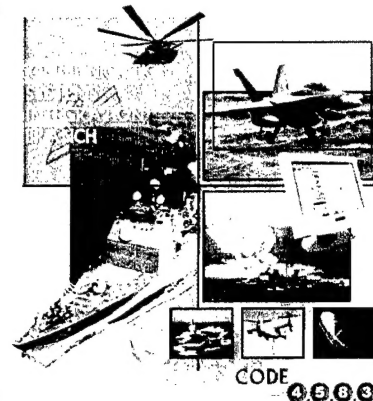Building 8225, Villa Road Unit 11, St. Inigoes, MD 20684-0010
COML: 301-862-8751
DSN: 342-3512 ext. 8751
FAX: 301-862-8601
EMAIL: DurkinMT@webfld.navy.mil

RD-674B/UNH Recorder-Reproducer

DESCRIPTION

- The RD-674B/UNH was developed to replace the RD-379/390 recorder & RP-214 reproducer, which are no longer manufactured or supported by industry sources & are obsolete, unreliable, & costly to maintain. The RD-674B/UNH is a commercial-off-the-shelf (COTS), PC-based, state-of-the-art, voice recording system that automatically records when voice signals are present at any one of 32 input channels. It operates in the Windows NT ™ environment & can record 32 audio channels (expandable to 80). Digital interface options are available. The system can be housed in a standard EIA cabinet with a 19-inch rack configuration.

- A major advantage of the RD-674B/UNH is that audio recording need not be interrupted to provide simultaneous & synchronized play-back of four channels of audio. This allows recording to continue while the operator plays back previously recorded transmissions.

- Instant recall on monitored channels is available via a single key action. This feature facilitates "hard to hear" or "hard to understand" distress calls.

- Voice data is digitized by the processor & stored on rewritable magneto-optical disks. Each disk can record up to 460 hours of voice transmissions. Commands & operator input may be given to the computer via a touch screen or a keyboard.

- Since the system does not contain a magnetic hard disk drive, communications security is assured when the magneto-optical disks containing the recorded data are ejected. To ensure rigid quality control standards are maintained, each RD-674B/UNH is subjected to a total system end-to-end test.
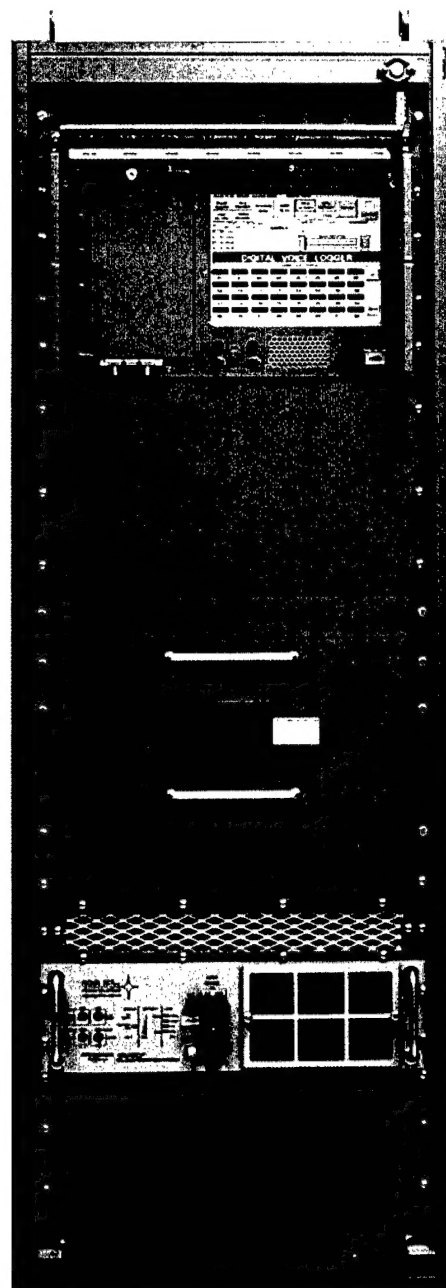
FEATURES

- Meets communications security requirements for shipping.

- Digital interface options available (NTDS).

- Signal recognition circuitry records only voice signals.

- Network connection for remote monitoring & control.

- Current IRIG-B/HAVEQUICK time format & time-of-day synchronization.

- Multi-channel voice data archiving, including automatic switching of recording drives in the event of drive or disk failure or when the recording disk is full.

- Remote & internal alarm to warn that the disk is in danger of becoming full or warn of media error.

- CD-ROM computer-based training.

- A disk storage drawer to store up to 81 magneto-optical disks.

- Navy Center-approved uninterruptible power supply (UPS), providing power conditioning & up to one hour of standby power.

- Journal of all magneto-optical disks with data & all recorded audio time tagged for easy retrieval.

- Flat panel display:
  - *Will not implode on impact, making it safer for an operator in a shipboard environment.*
  - *Less EMI susceptible than CRT displays.*
  - *Bright & viewable off axis.*

- Password protected to prevent unauthorized removal or erasure of magneto-optical disks.

- System self-test diagnostics & operator help menu.

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2 Archive	5.2 GB magneto-optical
1 Current	5.2 GB magneto-optical
Storage/disk:	460 hours at 4:1 comp.
Compression:	4:1 ADPCM/5:1 ADPCM
Playback:	
Access time	40 ms
Monitor	Any of 32 channels
Search by	Channel, date or time
Multi-channel	Up to 4 channels real-time
Shock:	MIL-S-901 Grade B (pending)
Vibration:	MIL-STD-167
Alarm:	Internal/external Dry contacts
Impedance:	Input: 25 kOhms Output: As low as 50 ohms
Isolation:	>80 dB between channels
Outputs:	
Audio	0.5 W
Headphones	8-600 ohms
Line	0 dBm
Power:	
Voltage	90 to 130/180 to 250
Frequency	47 to 63 Hz
Consumption	300 W
Temperature:	
Operating	0 to 45 degrees C
Shipping	-40 to 60 degrees C
Storage	0 to 60 degrees C
Relative Humidity:	20 - 80% non-condensing
Weight:	396 lbs.
Height:	60"
Width:	21.31"
Depth:	28.6"

NAWC
Aircraft Division
NAVAL AIR WARFARE CENTER

Matt Durkin

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